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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,258	KUO, SHIH-ZHENG	
	Examiner	Art Unit	
	Steven Kau	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) *30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. This action is responsive to the following communication: an Amendment filed on August 13, 2007.

- Claims 1-9 have been amended.
- Claims 10-30 have been added.
- Claims 1-30 are currently pending.
- Applicant's arguments filed on March 26, 2007 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 30 is objected to because of the following informalities: Claim 30 is a dependent claim to Claim 25. Claim 25 is an article claim and utility of the preamble of Claim 30 is inconsistent with Claim 25.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 19, the word "means for" is preceded by the words "scanning", "supporting", and "processing" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Applicant invokes 112 6th in claims 19-24. However, applicant's disclosure does not provide any detail structural information for the means-plus function. Without defining the structure for means-plus functions, one skilled in the art would not be able to understand what structure will perform for the recited function. Therefore any means that perform the equivalent functionality will be reasonable utilized by one of ordinary skill in the art. See MPEP Section 2181.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 25-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 25-30 are drawn to "an article of machine-readable media", which can be characterized as either "functional descriptive material" or "nonfunctional descriptive material". Since the article comprising steps of scanning a document, determining actual gray level and compensational gray level value and compensating a scanned image. Therefore, it is being considered as

"nonfunctional descriptive material" because "an article" per se in the claims can merely be an abstract idea.

Also, considering the claim as "functional descriptive material" imparts with functionality, but not being employed as a computer component (or other physical structures), is considered not statutory. "In contrast, a claimed computer-readable medium encoded with a computer program… is thus statutory." (See *"Interim Guideline for Examination of Patent Application for Patent Subject Matter Eligibility", ANNEX IV, Page 53, First Paragraph;).*

Therefore, both types of "descriptive material" are nonstatutory when claimed as descriptive material per se (See "Interim Guideline for Examination of Patent Application for Patent Subject Matter Eligibility", ANNEX IV, Page 50, Second Paragraph;). As well as the claimed program or an article is not necessarily a computer program, and is not encoded or embodied on a computer readable medium, there is no structural and functional interrelationships, thus, the claim is considered non-statutory.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 10-24 and 35-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheng et al (Sheng) (US 6,753,982) in view of Horiuchi et al (Horiuchi) (US 6,445,469).

Regarding **claim 10**, Sheng discloses a scanner, in that he teaches an apparatus comprising: a top portion having a surface (Fig. 1b); a scanning chassis (Scanning Module 14 of Fig. 2b) configured to be moveable under the top portion (Figs. 2a-b); a scanning platform disposed at the top portion (Flat Glass Platform 20 of Fig. 1a), the scanning platform configured to support a document above the scanning chassis (Figs. 1a-b, col 3, lines 55-57); a reference (Edge Detector 16 of Fig. 1a) disposed on the surface of the top portion adjacent to the scanning platform (Fig. 1b).

Sheng differs from claim 10, in that he does not teach that a reference pattern; a processor configured to determining actual gray level values for each pixel of a scanned image of the document; determine compensational gray level values for each pixel of the scanned image; and compensate the scanned image using the compensational gray level values.

Horiuchi discloses a document image reading device, in that he teaches and suggests that a reference pattern (Horiuchi discloses that the chart 17 is read by the image reading means in such a way that the longitudinal direction of the chart may meet with the feed direction of the image reading means, col 8, lines 49-51, and Chart 17 of Fig. 8); a processor (Abstract) configured to determine actual gray level values for each pixel of a scanned image of the document (col 3, lines 18-26, determining a gray-level change of each scale line, & col 13, lines 1-10; measuring black line or white line);

determine compensational gray level values for each pixel of the scanned image (examine and compensate the whole image, col 13, lines 16-26); and compensate the scanned image using the compensational gray level values (compensate the whole image by using the correction factor so that all the white (or black) portions show a constant value, col 13, lines 16-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include a reference pattern (to replace Sheng's Edge Detector which is disposed on the surface of the top portion adjacent to the scanning platform); a processor configured to determining actual gray level values for each pixel of a scanned image of the document; determine compensational gray level values for each pixel of the scanned image; and compensate the scanned image using the compensational gray level values taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 11**, Sheng differs from claim 11, in that he does not teach wherein the processor is further configured to determine a correctional gray level value based at least in part on the reference pattern.

Horiuchi discloses wherein the processor (Abstract) is further configured to determine a correctional gray level value based at least in part on the reference pattern (Chart 17 of Fig 8, col 8, lines 41-58, e.g. The chart 17 is read by the image reading means in such a way that the longitudinal direction of the chart may meet with the feed

direction of the image reading means, and “0” value for black and “255” value for white as indicated in the test chart).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include the processor is further configured to determine a correctional gray level value based at least in part on the reference pattern taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 12**, Sheng differs from claim 12, in that he does not teach wherein the reference pattern comprises a black pattern and a white pattern, and wherein the processor is further configured to determine a black correctional gray level value and a white correctional gray level value.

Horiuchi discloses wherein the reference pattern comprises a black pattern and a white pattern (Chart 17 of Fig 8), and wherein the processor is further configured to determine a black correctional gray level value and a white correctional gray level value (correction factor is determined by image data of density (high and low, “0” for black and “255” for white, col 4, lines 49 through col 5, line 11, & col 8, lines 52-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include the reference pattern comprises a black pattern and a white pattern, and wherein the processor is further configured to determine a black correctional gray level value and a white correctional gray level value

taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 13**, Sheng differs from claim 13, in that he does not discloses wherein the processor is further configured to determine the compensational gray level value based at least in part on the black correctional gray level value, the white correctional gray level value, a theoretical gray level value for complete black, a theoretical gray level value for complete white, and the actual gray level value for each of the pixels.

Horiuchi discloses wherein the processor is further configured to determine the compensational gray level value based at least in part on the black correctional gray level value (col 13, lines 1-26), the white correctional gray level value (col 13, lines 1-26), a theoretical gray level value for complete black (Fig. 28, col 11, lines 53 through col 12, line 11), a theoretical gray level value for complete white (Fig. 28, col 11, lines 53 through col 12, line 11) and the actual gray level value for each of the pixels (col 3, lines 18-26 determining a gray-level change of each scale line, & col 13, lines 1-10; measuring black line or white line).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include the reference pattern comprises a black pattern and a white pattern, and wherein the processor is further configured to determine a black correctional gray level value and a white correctional gray level value

taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 14**, Sheng differs from claim 14, in that he does not disclose wherein the reference pattern comprises a black pattern, and wherein the processor is further configured to determine a black correctional gray level value.

Horiuchi discloses wherein the reference pattern comprises a black pattern (Chart 17, Fig 8), and wherein the processor is further configured to determine a black correctional gray level value (col 13, lines 1-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include wherein the reference pattern comprises a black pattern, and wherein the processor is further configured to determine a black correctional gray level value taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 15**, the structure elements of apparatus claim 13 perform all steps of apparatus claim 15. Thus claim 15 is rejected under 103(a) for the same reason discussed in the rejection of claim 13.

Regarding **claim 16**, Sheng differs from claim 16, in that he does not disclose wherein the reference pattern comprises a white pattern, and wherein the processor is further configured to determine a white correctional gray level value.

Horiuchi discloses wherein the reference pattern comprises a white pattern (Chart 17 of Fig. 8), and wherein the processor is further configured to determine a white correctional gray level value (col 8, lines 41-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include wherein the reference pattern comprises a white pattern, and wherein the processor is further configured to determine a white correctional gray level value taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 17**, Sheng differs from claim 17, in that he does not disclose wherein the processor is further configured to determine the compensational gray level value based at least in part on the white correctional gray level value, a theoretical gray level value for complete white, and the actual gray level value for each of the pixels.

Horiuchi discloses wherein the processor is further configured to determine the compensational gray level value based at least in part on the white correctional gray level value (col 13, lines 1-26), a theoretical gray level value for complete white (Fig. 28, col 11, lines 53 through col 12, line 11), and the actual gray level value for each of the

pixels (col 3, lines 18-26 determining a gray-level change of each scale line, & col 13, lines 1-10; measuring black line or white line).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include wherein the processor is further configured to determine the compensational gray level value based at least in part on the white correctional gray level value, a theoretical gray level value for complete white, and the actual gray level value for each of the pixels taught by Horiuchi to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 19**, the structure elements of apparatus claim 10 perform all steps of apparatus claim 19. Thus claim 19 is rejected under 103(a) for the same reason discussed in the rejection of claim 10.

Regarding **claim 18**, Sheng discloses wherein a length of the edge detector is equal to or greater than a length of the scanning platform (Edge detector 16 of Figs 1a-b).

Sheng differs from claim 18, in that he does not teach the reference pattern.

Horiuchi discloses a reference patter (Chart 17 of Fig 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sheng to include the reference pattern taught by Horiuchi. It would have been a common sense for one of skilled in the art at the time of invention to replace Sheng's teaching of using a edge detector, which length is equal to

or greater than the length of the scanning platform (Edge Detector 16 of Fig. 1a-b, col 4, lines 31-44) with a reference pattern at the location of Sheng's edge detector to improve the accuracy of image scanning to compensate the possible distortion of a reproduced image due to fluctuation of the scanning speed without a considerable increase of the manufacturing cost of the image reading device (col 1, lines 45-49).

Regarding **claim 24**, the structure elements of apparatus claim 18 perform all steps of apparatus claim 24. Thus claim 24 is rejected under 103(a) for the same reason discussed in the rejection of claim 18.

Regarding **claim 30**, the structure elements of apparatus claim 18 perform all steps of article claim 30. Thus claim 30 is rejected under 103(a) for the same reason discussed in the rejection of claim 18.

Regarding **claim 20**, the structure elements of apparatus claim 11 perform all steps of apparatus claim 20. Thus claim 20 is rejected under 103(a) for the same reason discussed in the rejection of claim 11.

Regarding **claim 21**, the structure elements of apparatus claim 12 perform all steps of apparatus claim 21. Thus claim 21 is rejected under 103(a) for the same reason discussed in the rejection of claim 12.

Regarding **claim 22**, the structure elements of apparatus claim 21 perform all steps of apparatus claim 22. Thus claim 22 is rejected under 103(a) for the same reason discussed in the rejection of claim 21.

Regarding **claim 23**, the structure elements of apparatus claim 16 perform all steps of apparatus claim 23. Thus claim 23 is rejected under 103(a) for the same reason discussed in the rejection of claim 16.

Regarding **claim 25**, the structure elements of apparatus claim 10 perform all steps of article claim 25. Thus claim 25 is rejected under 103(a) for the same reason discussed in the rejection of claim 10.

Regarding **claim 26**, the structure elements of apparatus claim 11 perform all steps of article claim 26. Thus claim 26 is rejected under 103(a) for the same reason discussed in the rejection of claim 11.

Regarding **claim 27**, the structure elements of apparatus claim 12 perform all steps of article claim 27. Thus claim 27 is rejected under 103(a) for the same reason discussed in the rejection of claim 12.

Regarding **claim 28**, the structure elements of article claim 27 perform all steps of article claim 28. Thus claim 28 is rejected under 103(a) for the same reason discussed in the rejection of claim 28.

Regarding **claim 29**, the structure elements of apparatus claim 16 perform all steps of article claim 29. Thus claim 29 is rejected under 103(a) for the same reason discussed in the rejection of claim 16.

9. Claims 1, 3-4, 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al (Horiuchi) (US 6,445,469) in view of Watanabe et al (Watanabe) (US 5,050,231).

Regarding **claim** 1, Horiuchi discloses document image reading device, in that he teaches an image compensating method, comprising: scanning document (col 3, lines 18-26 and lines 54-58), a longitudinal white pattern and a longitudinal black pattern (Chart 17 of Fig. 8, col 8, lines 49-51), thereby producing, in order to produce a plurality of actual gray level values for a plurality of pixels of the document (col 3, lines 18-26, determining a gray-level change of each scale line, & col 13, lines 1-10; measuring black line or white line); determining a correctional gray level value for complete black (e.g. "0" value indicates complete black, col 8, lines 52-58) and a correctional gray level value for complete white ("255" value indicates complete white, col 8, lines 52-58) based at least in part on the longitudinal black and white patterns (Chart 17 of Fig. 8, col 8, lines 41-58); a theoretical gray level value for complete black (Figs. 23 & 28, col 11, lines 25-35 & lines 54 through col 12, line 11), a theoretical gray level value for complete white (Figs. 23 & 28, col 11, lines 25-35 & lines 54 through col 12, line 11), and the actual gray level value for each of the pixels (col 3, lines 18-26, determining a gray-level change of each scale line, & col 13, lines 1-10; measuring black line or white line): and compensating a scanned image of the document using the compensational gray level value for each of the pixels (compensate the whole image by using the correction factor so that all the white (or black) portions show a constant value, col 13, lines 16-44).

Horiuchi differs from claim 1, in that he does not expressly teach that determining a compensational gray level value with respect to the actual gray level value each of the

pixels based at least in part on the correctional gray level value for complete black, the correctional gray level value for complete white.

Watanabe discloses determining a compensational gray level value (produces gamma-corrected gray-level, col 3, lines 55-65) with respect to the actual gray level value (gray-level data produced by scanning and A/D converting, Fig. 1, col 3, lines 40-51) each of the pixels based at least in part on the correctional gray level value for complete black (col 7, lines 28-47), the correctional gray level value for complete white (col 7, lines 28-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Horiuchi to include determining a compensational gray level value with respect to the actual gray level value each of the pixels based at least in part on the correctional gray level value for complete black, the correctional gray level value for complete white taught by Watanabe to compensate for non-linearity in responses of the line sensor (col 7, lines 28-34).

Regarding **claim 3**, Horiuchi discloses the image compensating method as recited in claim 1, wherein determining the compensational gray level value for each pixel comprises: calculating [(each of the actual gray level values with respect to each of the pixels -- the correctional gray level value for complete black) / (the correctional gray level value for complete white -- the correctional gray level to value for complete black) x (the theoretical gray level value for complete white -- the theoretical gray level value for complete black)] (Horiuchi teaches and suggests embodiments (e.g. First, Third to Eleventh) for using equations (col 9, lines 50-60) and subroutines A1, A2 and A3 for

determining compensational gray level, Figs. 9, 16, 25, 26, 27 and 28, cols 9 through 12).

Regarding **claim 4**, the structure elements of method claim 1 perform all steps of method claim 4. Thus claim 4 is rejected under 103(a) for the same reason discussed in the rejection of claim 1.

Regarding **claim 6**, the structure elements of method claim 3 perform all steps of method claim 6. Thus claim 6 is rejected under 103(a) for the same reason discussed in the rejection of claim 3.

Regarding **claim 7**, the structure elements of method claim 1 perform all steps of method claim 7. Thus claim 7 is rejected under 103(a) for the same reason discussed in the rejection of claim 1.

Regarding **claim 9**, the structure elements of method claim 3 perform all steps of method claim 9. Thus claim 9 is rejected under 103(a) for the same reason discussed in the rejection of claim 3.

10. Claims 2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al (Horiuchi) (US 6,445,469) in view of Watanabe et al (Watanabe) (US 5,050,231) as applied to claims 1, 4 and 7 above, and further in view of Sheng et al (Sheng) (US 6,753,982).

Regarding **claim** 2, Horiuchi teaches the longitudinal black and white patterns (Chart 17 of Fig 8, col 8, lines 49-51).

Horiuchi differs from claim 2, in that he does not teach wherein a top (of a scanner); a scanning chassis, configured to be movable under the top; and a scanning platform disposed at the top, wherein the scanning platform is configured to support and used to be aligned with the document above the scanning chassis, wherein the longitudinal black and white patterns are disposed on an inner wall of the top adjacent to the scanning platform, such that the scanning chassis can scan the document and the longitudinal black and white patterns substantially simultaneously.

Sheng discloses wherein the method is used in a scanner (Figs. 1-5) and the scanner comprises: a top (of a scanner, Figs 1a-c); a scanning chassis (Scanning Module 14 of Figs. 1 a-b & 2a), configured to be movable under the top (Figs. 1a-b, 2a and 4b, col 3, lines 50-65); and a scanning platform disposed at the top (Flat Glass Platform 20 of Fig. 1a-c), wherein the scanning platform is configured to support and used to be aligned with the document above the scanning chassis, (Figs. 1a-c, col 3, lines 55-57), wherein (the edge detector) is disposed on an inner wall of the top adjacent to the scanning platform, such that the scanning chassis can scan the document and (the edge detector) substantially simultaneously (Figs. 1a-b, col 3 lines 62 through col 4, line 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Horiuchi to the scanner comprises: a top (of a scanner); a scanning chassis, configured to be movable under the top; and a scanning platform disposed at the top, wherein the scanning platform is configured to support and used to be aligned with the document above the scanning chassis, wherein the

longitudinal black and white patterns are disposed on an inner wall of the top adjacent to the scanning platform, such that the scanning chassis can scan the document and the longitudinal black and white patterns substantially taught by Sheng, and replace the edge detector with the chart of Fig 8. The motivation is to improve a scanner to obtain actual gray level of a document to be scanned and gray level of black and white test pattern, and to determine gray level compensation for better image reproduction quality.

Regarding **claim 5**, the structure elements of method claim 2 perform all steps of method claim 5. Thus claim 5 is rejected under 103(a) for the same reason discussed in the rejection of claim 2.

Regarding **claim 8**, the structure elements of method claim 2 perform all steps of method claim 8. Thus claim 8 is rejected under 103(a) for the same reason discussed in the rejection of claim 2.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on Monday to Friday, from 8:30 am -5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Kau
Patent Examiner
Division: 2625
October 9, 2007

KING Y. POON
SUPERVISORY PATENT EXAMINER